

APRIL/MAY 2024

**23UFMB14 — INTRODUCTION TO
MICROBIAL WORLD (FC)**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define the term Biogenesis.
2. List out the key concept of the germ theory.
3. How does environmental change impact microbial diversity?
4. What are prokaryotes?
5. Explain bioremediation.
6. What is an antigen-presenting cell (APC) and add a note on its role in immunology?
7. What is the role of culture collection centers in microbiology?
8. Define the term Axenic Culture.
9. Name the primary electron source used in SEM.
10. List out the applications of staining.



SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) List out the Lister's principles of aseptic surgery.

Or

- (b) Analyze and explain the Work of Winogradsky and Beijerinck.

12. (a) Classify Microorganism.

Or

- (b) Illustrate about the eukaryotic microorganisms.

13. (a) List out the branches of Microbiology and explain its function.

Or

- (b) Explain about Thrust areas of microbiology.

14. (a) Outline the Preservation methods of pure culture.

Or

- (b) Discuss about pure culture techniques.

15. (a) Demonstrate the types of staining.

Or

- (b) List out the Principles of microscopy.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Discuss in detail about the Discovery and developments of vaccines and modern chemotherapy.

17. Explain in detail about the Distribution of microorganisms in nature.

18. Elaborate notes on Impact of microorganism in environment and its impact on human life.

19. Explain in detail about the principles and methods of obtaining pure culture.

20. Compare and contrast about the Bright field microscopy and dark field microscopy.

